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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/333,724	06/15/1999	BRYAN C. GEBHARDT	2050.007US1	4443
44367 7590 04/19/2007 SCHWEGMAN, LUNDBERG, WOESSNER & KLUTH/OPEN TV P.O. BOX 2938 MINNEAPOLIS, MN 55402-0938			EXAMINER SALCE, JASON P	
			ART UNIT	PAPER NUMBER
			2623	
SHORTENED STATUTORY PERIOD OF RESPONSE		MAIL DATE	DELIVERY MODE	
3 MONTHS		04/19/2007	PAPER	

Please find below and/or attached an Office communication concerning this application or proceeding.

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

Office Action Summary

Application No.

09/333,724

Applicant(s)

GEBHARDT ET AL.

Examiner

Jason P. Salce

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 21 July 2006.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 2-23, 25, 26 and 28 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 22 and 23 is/are allowed.
- 6) ☒ Claim(s) 2-21, 25, 26 and 28 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____

DETAILED ACTION

Response to Arguments

Applicant's arguments with respect to claims 2-23, 25-26 and 28 have been considered but are moot in view of the new ground(s) of rejection.

Claim Rejections - 35 USC § 101

35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

Claims 25-26 are rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter.

Referring to claim 25, the Interim Guidelines for Examination of Patent Applications for Patent Subject Matter Eligibility state on Page 53, that claimed computer programs that do not define any structural and functional interrelationships between the computer program and other claimed elements of a computer which permit the computer program's functionality to be realized is non-statutory. Claims 25-26 state only a computer program product and thus no structural element of a computer is realized, therefore claim 25 is non-statutory.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

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(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

Claims 2-4, 8-9, 10, 12, 28 are rejected under 35 U.S.C. 102(e) as being clearly anticipated by Kalluri et al. (U.S. Patent No. 5,937,331).

Referring to claim 8, Kalluri discloses a computer-implemented method of controlling the broadcast and reception of an interactive application (see Figure 10 and Column 2, Lines 24-35).

Kalluri also discloses receiving control signals that control the broadcast of broadcast programs (see Column 10, Lines 52-56).

Kalluri also discloses determining from the control signals an interactive application associated with one of the broadcast programs (see Column 10, Lines 49-51).

Kalluri also discloses generating from the control signals, commands to maintain execution and termination of the interactive application in synchrony with either the display or the broadcast of the broadcast program (see Column 11, Lines 41-52), wherein receiving control signals comprises receiving the control signals from a scheduling system by emulating a broadcast source device that is controlled by the scheduling system (see again Column 2, Line 62 through Column 3, Line 52 for the trigger commands containing data to start, stop or pause the interactive application during the broadcast of a television program and Column 10, Lines 48-56 for the trigger commands being generated in conjunction with a playlist of commands that are also

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used to control the actual broadcast of the television program, therefore the control signals/commands clearly teach receiving the commands/control signals from a scheduling system (the playlist) by emulating a broadcast source device that is controlled by the scheduling system (the playlist emulating an actual broadcast source by containing information to start, stop and pause the interactive application, as well as, the control signals/commands controlling the actual broadcast of the television program)).

Referring to claim 10, Kalluri discloses a computer implemented method of controlling the broadcast and reception of an interactive application (see Figure 10 and Column 2, Lines 24-35).

Kalluri also discloses receiving control signals that control the broadcast of broadcast programs (see Column 10, Lines 52-56).

Kalluri also discloses determining from the control signals an interactive application associated with one of the broadcast programs (see Column 10, Lines 49-51).

Kalluri also discloses generating from the control signals, commands to maintain execution and termination of the interactive application in synchrony with either the display or the broadcast of the broadcast program (see Column 11, Lines 41-52), wherein the control signals are generated by a scheduling system in response to a playlist defining a series of broadcast programs including program identifiers and information describing when the broadcast programs are to be broadcast (see electronic

playlist 406 in Figure 10 and Column 10, Lines 48-56).

Referring to claim 28, see the rejection of claim 8.

Referring to claim 2, Kalluri discloses that generating the commands further comprises generating commands to maintain synchronous display of the interactive application with display of the broadcast program on a broadcast receiver (see Figure 10 and Column 2, Lines 24-35 and Column 8, Lines 12-14).

Referring to claim 3, Kalluri discloses generating commands to terminate display of the interactive application in synchrony with termination of the display of the broadcast program (see Column 10, Lines 48-51 for generating trigger commands to control execution of an interactive application in synchrony with the broadcast of a television program and Column 7, Lines 21-25 and Column 8, Line 52 through Column 9, Line 10 and Figure 7 for the trigger commands generated by the trigger generator 14 containing a stop (termination), play, continue and pause command).

Referring to claim 4, Kalluri discloses that generating the commands further comprises determining from the control signals a state of the broadcast program (see Column 10, lines 48-51), responsive to the state of the broadcast program, determining a state of the interactive application and generating at least one command appropriate to the state of the interactive application (see Column 11, Lines 36-52).

Referring to claim 9, Kalluri discloses translating the control signals into a set of commands to an interactive application server for selectively instructing the server to schedule, start, stop, and cancel interactive applications for the broadcast programs associated with the control signals (see Column 11, Lines 45-52 and Figures 7-8 for translating the control signals into native commands to control execution of the interactive application, wherein the control of execution includes starting, stopping scheduling and pausing the interactive application (see Figures 7-8)).

Referring to claim 12, Kalluri discloses that the control signals are pre-recorded and stored in association with the broadcast programs that are controlled by the control signals (see Column 10, Lines 56-65).

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 5, 17-19 and 21 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kalluri et al. (U.S. Patent No. 5,937,331) in view of Menard et al. (5,563,648).

Referring to claim 5, Kalluri discloses a computer-implemented method of

controlling the broadcast and reception of an interactive application (see Figure 10 and Column 2, Lines 24-35).

Kalluri also teaches receiving control signals that control the broadcast of broadcast programs (see Column 10, Lines 52-56).

Kalluri also teaches determining from the control signals an interactive application associated with one of the broadcast programs (see Column 10, Lines 48-51).

Kalluri also teaches generating from the control signals, commands to maintain execution and termination of the interactive application in synchrony with either the display or the broadcast of the broadcast program (see Column 11, Lines 41-52), wherein the broadcast program is a television show (see Column 10, Lines 40-43).

Kalluri teaches that a broadcast system desires to know when a commercial is being broadcast (see Column 1, Lines 55-57), however Kalluri is silent as to determining from the control signals that a commercial is being broadcast and responsive to determining that a commercial is being broadcast, generating a command to suspend execution of the interactive application associated with the television show and responsive to determining that the commercial is no longer being broadcast, generating a command to resume execution of the interactive application associated with the television program.

Menand teaches that a broadcaster may determine when a commercial is being broadcast and responsive to this determination inserting special signal packets (commands) into the interactive application transmission package (see Column 12,

Lines 47-61).

Menand further teaches that these special signal packets (commands) allow the execution of the suspension and execution of the interactive application associated with the television program during commercial interruptions (see Column 11, Line 62 through Column 12, Line 19).

At the time the invention was made, it would have been obvious to a person of ordinary skill in the art, to modify broadcaster's trigger insertion process, as taught by Kalluri, to include the commercial determination and command insertion process, as taught by Menand, for the purpose of maintaining proper synchronization between the AVI executable code, and the sound and graphics being generated by that code, and the audio and video components being received (see Column 2, Lines 42-45).

Referring to claim 17, Kalluri discloses all of the limitations in claim 10, but fails to teach determining a type (commercial) of a broadcast program for a control signal.

Menand teaches that a broadcaster may determine when a commercial is being broadcast and responsive to this determination inserting special signal packets (commands) into the interactive application transmission package (see Column 12, Lines 47-61).

At the time the invention was made, it would have been obvious to a person of ordinary skill in the art, to modify broadcaster's trigger insertion process, as taught by Kalluri, to include the commercial determination and command insertion process, as taught by Menand, for the purpose of maintaining proper synchronization between the

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AVI executable code, and the sound and graphics being generated by that code, and the audio and video components being received (see Column 2, Lines 42-45).

Claim 18 corresponds to claim 17, where Menand further teaches that these special signal packets (commands) allow the execution of the suspension and execution of the interactive application associated with the television program during commercial interruptions (see Column 11, Line 62 through Column 12, Line 19).

Referring to claim 19, see the rejection of claims 17-18.

Referring to claim 21, see the rejection of claims 5, 10 and 17-19.

Claims 6-7 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kalluri et al. (U.S. Patent No. 5,937,331) in view of Menard et al. (5,563,648) in further view of Applicant's Admitted Prior Art.

Referring to claim 6, Kalluri discloses a computer-implemented method of controlling the broadcast and reception of an interactive application (see Figure 10 and Column 2, Lines 24-35).

Kalluri also teaches receiving control signals that control the broadcast of broadcast programs (see Column 10, Lines 52-56).

Kalluri also teaches determining from the control signals an interactive application associated with one of the broadcast programs (see Column 10, Lines 48-

51).

Kalluri also teaches generating from the control signals, commands to maintain execution and termination of the interactive application in synchrony with either the display or the broadcast of the broadcast program (see Column 11, Lines 41-52), wherein the broadcast program is a television show (see Column 10, Lines 40-43).

Kalluri teaches that a broadcast system desires to know when a commercial is being broadcast (see Column 1, Lines 55-57), however Kalluri is silent as to determining from the control signals that a commercial is being broadcast and responsive to determining that a commercial is being broadcast, generating a command to suspend execution of the interactive application associated with the television show and responsive to determining that the commercial is no longer being broadcast, generating a command to resume execution of the interactive application associated with the television program.

Menand teaches that a broadcaster may determine when a commercial is being broadcast and responsive to this determination inserting special signal packets (commands) into the interactive application transmission package (see Column 12, Lines 47-61).

Menand further teaches that these special signal packets (commands) allow the execution of the suspension and execution of the interactive application associated with the television program during commercial interruptions (see Column 11, Line 62 through Column 12, Line 19).

At the time the invention was made, it would have been obvious to a person of

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ordinary skill in the art, to modify broadcaster's trigger insertion process, as taught by Kalluri, to include the commercial determination and command insertion process, as taught by Menand, for the purpose of maintaining proper synchronization between the AVI executable code, and the sound and graphics being generated by that code, and the audio and video components being received (see Column 2, Lines 42-45).

Although Kalluri discloses that the electronic playlist 406 in Figure 10 is capable of controlling the specific television signal provided to VBI encoder 404 (see Column 10, Lines 52-56), Kalluri fails to teach how the playlist controls the specific television signal.

Applicant's specification teaches on Page 3 that conventional television broadcast systems (which is admitted prior art) control broadcast sources in a broadcast system with sequences of native control signals and that these control signals instruct various ones of the broadcast sources to start, stop, load or otherwise manage their broadcast programs.

At the time the invention was made, it would have been obvious to a person of ordinary skill in the art, to modify the electronic playlist that controls the broadcast of television programming, as taught by Kalluri and Menard, to utilize the playlist that provides further control of the broadcast of television programming by utilizing a start, stop or load command, as taught by Applicant Admitted Prior Art, for the purpose of providing various degrees of automated and manual control over how the broadcast programs are selected and output for broadcast transmission (see Page 3 of Applicant's Specification).

Referring to claim 7, see the rejection of claim 6 and further note that Menard also discloses that responsive to determining that a second television show is being broadcast, generating commands to terminate the first interactive application and to begin execution of a second interactive application associated with the second television show (see Column 14, Lines 7-15 for changing to a second television channel and starting a new interactive application while the previous interactive application is in the suspended state).

Claims 11, 13-16 and 20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kalluri et al. (U.S. Patent No. 5,937,331) in view of Applicant's Admitted Prior Art.

Referring to claim 11, Kalluri discloses a computer implemented method of controlling the broadcast and reception of an interactive application (see Figure 10 and Column 2, Lines 24-35).

Kalluri also discloses receiving control signals that control the broadcast of broadcast programs (see Column 10, Lines 52-56).

Kalluri also discloses determining from the control signals an interactive application associated with one of the broadcast programs (see Column 10, Lines 49-51).

Kalluri also discloses generating from the control signals, commands to maintain execution and termination of the interactive application in synchrony with either the

display or the broadcast of the broadcast program (see Column 11, Lines 41-52).

Kalluri fails to teach that the control signals are generated by a scheduling system in response to actions of an operator to manually control broadcast of a broadcast program.

Applicant's specification teaches that conventional television broadcast systems provide manual control over how the broadcast programs are selected and output for broadcast transmission (see Page 3). Applicant's specification further teaches that in a manual control system (of the conventional broadcast system) that control signals are generated in response to manual operations of human operators (see Page 3). Therefore, Applicant's Admitted Prior Art discloses that control signals (playlist) are generated by a scheduling system in response to actions of an operator to manually control broadcast of a broadcast program.

At the time the invention was made, it would have been obvious to a person of ordinary skill in the art, to modify the scheduling system, as taught by Kalluri and Menard, to utilize the manual scheduling of broadcast programs, as taught by Applicant Admitted Prior Art, for the purpose of selectively activate or deactivate any of the broadcast sources, and assign the output to the appropriate channel (see Page 3 of Applicant's specification).

Referring to claims 13-14 and 16, Kalluri discloses all of the limitations of claim 10, as well as determining an interactive application associated with the selected broadcast program (see Column 10, Lines 49-51) and generating a command to

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schedule execution of the determined interactive application (see Column 11, Lines 41-52).

Although Kalluri discloses that the electronic playlist 406 in Figure 10 is capable of controlling the specific television signal provided to VBI encoder 404 (see Column 10, Lines 52-56), Kalluri fails to teach how the playlist controls the specific television signal.

Applicant's specification teaches on Page 3 that conventional television broadcast systems (which is admitted prior art) control broadcast sources in a broadcast system with sequences of native control signals and that these control signals instruct various ones of the broadcast sources to start, stop, load (prepare) or otherwise manage their broadcast programs.

At the time the invention was made, it would have been obvious to a person of ordinary skill in the art, to modify the electronic playlist that controls the broadcast of television programming, as taught by Kalluri and Menard, to utilize the playlist that provides further control of the broadcast of television programming by utilizing a start, stop or load (prepare) command, as taught by Applicant Admitted Prior Art, for the purpose of providing various degrees of automated and manual control over how the broadcast programs are selected and output for broadcast transmission (see Page 3 of Applicant's Specification).

Referring to claim 15, Kalluri discloses a computer-implemented method of controlling the broadcast and reception of an interactive application (see Figure 10 and Column 2, Lines 24-35).

Kalluri also discloses receiving control signals that control the broadcast of broadcast programs (see Column 10, Lines 52-56).

Kalluri also discloses determining from the control signals an interactive application associated with one of the broadcast programs (see Column 10, Lines 49-51).

Kalluri also discloses generating from the control signals, commands to maintain execution and termination of the interactive application in synchrony with either the display or the broadcast of the broadcast program (see Column 11, Lines 41-52).

Kalluri also discloses determining an interactive application associated with the selected broadcast program (see Column 10, Lines 49-51).

Kalluri also discloses generating a command to start execution of the determined interactive application by transmitting a trigger to an interactive application previously transmitted (see Column 3, Lines 53-65).

Although Kalluri discloses that the electronic playlist 406 in Figure 10 is capable of controlling the specific television signal provided to VBI encoder 404 (see Column 10, Lines 52-56), Kalluri fails to teach how the playlist controls the specific television signal.

Applicant's specification teaches on Page 3 that conventional television broadcast systems (which is admitted prior art) control broadcast sources in a broadcast system with sequences of native control signals and that these control signals instruct various ones of the broadcast sources to start, stop, load (prepare) or otherwise manage their broadcast programs.

At the time the invention was made, it would have been obvious to a person of

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ordinary skill in the art, to modify the electronic playlist that controls the broadcast of television programming, as taught by Kalluri and Menard, to utilize the playlist that provides further control of the broadcast of television programming by utilizing a start, stop or load (prepare) command, as taught by Applicant Admitted Prior Art, for the purpose of providing various degrees of automated and manual control over how the broadcast programs are selected and output for broadcast transmission (see Page 3 of Applicant's Specification).

Referring to claim 20, see the rejection of claims 13 and 15-16.

Allowable Subject Matter

Claims 22-23 are allowed. Reasons for allowance will be stated upon allowance of the entire instant application.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jason P. Salce whose telephone number is (571) 272-7301. The examiner can normally be reached on M-F 9am-6pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, John Miller can be reached on (571) 272-7353. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Jason P Salce
Primary Examiner
Art Unit 2623

April 16, 2007

JASON SALCE
PRIMARY PATENT EXAMINER

A handwritten signature in black ink, appearing to read "Jason Salce", written in a cursive style.